

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
)	
Federal Communications Commission Requests)	WT Docket No. 05-157
Comment on Spectrum Needs of Emergency)	
Response Providers)	FCC 05-80
)	

**COMMENTS OF
THE INFORMATION TECHNOLOGY INDUSTRY COUNCIL**

April 28, 2005

Table of Contents

I.	INTRODUCTION	1
II.	PUBLIC SAFETY LACKS ACCESS TO SIGNIFICANT BLOCKS OF SPECTRUM ALLOCATED FOR EMERGENCY RESPONDERS	3
A.	The FCC Has Already Allocated Significant Blocks of Spectrum for Public Safety	4
B.	Congress and the FCC Must Act to Make Current Allocations of Public Safety Spectrum Accessible to First Responders	4
1.	A Handful of Broadcasters Still Encumbers Public Safety Spectrum in the 700 MHz Band	5
2.	The 700 MHz Band is Prime Spectrum for Public Safety – Offering Highly Favorable Propagation Characteristics, Lower Deployment Costs, and Interoperability	6
III.	PUBLIC SAFETY LACKS MUCH OF THE FUNDING NEEDED TO ACHIEVE NATIONWIDE INTEROPERABILITY.....	8
IV.	THE OPPORTUNITY COST OF <i>NOT</i> CLEARING THE 700 MHZ BAND OF LEGACY ANALOG TELEVISION STATIONS IS ENORMOUS	9
A.	The 700 MHz Band is Highly Underutilized in its Current Use	10
B.	The 700 MHz Band Would Be Highly Valuable If Put to Its Reallocated Uses	12
V.	CONCLUSION	15

**Before the
Federal Communications Commission
Washington, D.C. 20554**

)	
)	
In the Matter of)	
)	
Federal Communications Commission Requests)	WT Docket No. 05-157
Comment on Spectrum Needs of Emergency)	
Response Providers)	FCC 05-80
)	

**COMMENTS OF
THE INFORMATION TECHNOLOGY INDUSTRY COUNCIL**

I. INTRODUCTION

The Information Technology Industry Council (“ITI”)¹ hereby respectfully submits these comments in response to the *Public Notice* released by the Federal Communications Commission (“FCC” or “Commission”) in the above captioned proceeding.² ITI applauds the FCC’s effort to seek input regarding the need for,

¹ ITI represents the leading U.S. providers of information technology (IT) products and services. ITI is the voice of the high tech community, advocating policies that advance industry leadership in technology and innovation; open access to new and emerging markets; promote e-commerce expansion; protect consumer choice; and enhance the global competitiveness of its member companies.

² FCC Requests Comments on Spectrum Needs of Emergency Response Providers, *Public Notice*, WT Docket No. 05-157, FCC 05-80 (rel. Mar. 29, 2005) (“*Public Notice*”).

operation and administration of a potential nationwide interoperable broadband mobile communications network for emergency response providers.³

ITI believes that such interoperability is critical to the country's homeland security in this post-9/11 era. ITI believes, however, that there are two fundamental barriers to the build out of a nationwide interoperable network for emergency response providers. First, the public safety community currently does not have access to the spectrum which the Commission has allocated for first responders, including a block of spectrum at 698 – 806 MHz currently used by UHF channels 52 – 69 (commonly referred to as the “700 MHz band”).⁴ Second, the public safety community lacks much of the funds necessary to achieve full nationwide interoperability. ITI urges Congress and the FCC to expeditiously address these issues and thus enable emergency responders to protect the American people to the greatest extent technologically possible.

ITI further contends that the opportunity cost of not expeditiously clearing the 700 MHz band of legacy analog television (“TV”) stations currently encumbering channels 52 – 69 is enormous. In addition to vastly improving national security, promptly clearing (and auctioning) the 700 MHz band would greatly advance spectrum efficiency, raise considerable federal revenues, and generate substantial consumer benefits. This country cannot afford to forego such significant gains.

³ *Id.*

⁴ The 700 MHz band would be extremely valuable for both public safety and broadband wireless services. Clearing UHF channels 52 – 69 of legacy analog TV stations will make available 108 MHz of prime spectrum for such services. The FCC has allocated the 700 MHz band as follows: 24 MHz for public safety services and 84 MHz for commercial services. (ITI notes that 24 MHz of the 84 MHz reallocated for commercial use has already been auctioned. Thus, 60 MHz remains to be auctioned for commercial services.) ITI strongly supports this allocation.

Thus, ITI believes that, in its report to Congress on the needs of emergency response providers,⁵ the FCC should recommend that Congress: (i) establish an early date certain for the completion of the digital television (“DTV”) transition (thereby clearing the 700 MHz spectrum of legacy analog TV stations) and (ii) provide funding to help the public safety community achieve nationwide interoperability. Indeed, ITI firmly believes that providing emergency responders with the funds they need to most efficiently utilize currently allocated public safety bandwidth – rather than additional spectrum – would be the most effective use of the cleared 700 MHz band.

II. PUBLIC SAFETY LACKS ACCESS TO SIGNIFICANT BLOCKS OF SPECTRUM ALLOCATED FOR EMERGENCY RESPONDERS

ITI supports the current allocations of spectrum for public safety use. ITI urges Congress and the FCC to assist first responders in gaining access to these blocks of spectrum, including clearing the handful of broadcasters which still encumbers the 24 MHz of spectrum allocated to public safety in the 700 MHz band. This 700 MHz spectrum is critical to improving the nation’s emergency communications, including the deployment of an interoperable public safety network.⁶

⁵ The Intelligence Reform and Terrorism Prevention Act requires the FCC to conduct a study to assess the needs of emergency response providers and report its findings to Congress by December 17, 2005. Intelligence Reform and Terrorism Prevention Act of 2004, Pub. L. 108-458, § 7001, 118 Stat. 3638, 3855-56 (2004) (“Intelligence Reform Act”).

⁶ See In the Matter of the Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communications Through the Year 2010, *First Report and Order and Third Notice of Proposed Rulemaking*, WT Docket No. 96-86, 14 FCC Rcd 152, 214 (1998) (allocating approximately 10% of the 700 MHz band for interoperability purposes).

A. The FCC Has Already Allocated Significant Blocks of Spectrum for Public Safety

The Commission has recently allocated significant blocks of spectrum – totaling 97 MHz – to meet the needs of the public safety community.⁷ In addition to the 24 MHz allocated for public safety services in the 700 MHz band, the FCC has designated 50 MHz in 4.9 GHz band for broadband and advanced technology applications in support of public safety.⁸ The Commission also recently reallocated spectrum at 482-488 MHz in the New York City area for interoperable public safety communications.⁹ Moreover, the FCC recently created access to an average of 4.5 MHz of additional spectrum in the 800 MHz band for public safety licenses.¹⁰ ITI supports these current allocations of spectrum for public safety use.

B. Congress and the FCC Must Act to Make Current Allocations of Public Safety Spectrum Accessible to First Responders

ITI strongly encourages Congress and the FCC to take any and all actions necessary to expeditiously make the current allocations of public safety spectrum fully available to first responders. A critical step in making this spectrum accessible to the public safety community is clearing the underutilized 700 MHz band of legacy analog TV stations (as Congress contemplated in the Balanced Budget Act of 1997). As noted above, clearing the 700 MHz band of such stations will free up 24 MHz for public safety services. Thus, ITI believes that, in its report to Congress, the Commission should

⁷ *Public Notice* at 3.

⁸ *Id.*

⁹ *Id.*

¹⁰ *Id.*

recommend that Congress establish an early date certain for the completion of the DTV transition, thereby clearing the spectrum of legacy analog TV stations.

1. A Handful of Broadcasters Still Encumbers Public Safety Spectrum in the 700 MHz Band

Unfortunately, more than eight years later, broadcasters still encumber public safety spectrum in the 700 MHz band – thereby depriving first responders of 24 MHz of prime spectrum that could be used to save American lives in the event of a national, state, or local emergency. Indeed, “by blocking DTV transition legislation, broadcasters are keeping public safety from getting spectrum that would improve interoperability.”¹¹

As Robert LeGrande, Deputy Chief Technology Officer for the Office of Public Safety Wireless Communications in Washington, D.C., states, “It’s time that [public safety] got the spectrum that was allocated to us years ago.... Broadband, wireless data networks can provide critical public safety and homeland security applications to first responders and commanders.”¹² ITI agrees and believes that the 700 MHz band should be cleared of legacy analog TV stations as soon as possible. In this post-9/11 era, further delay risks the welfare of the nation’s citizens and must not be tolerated.

¹¹ “Interoperability Amendment Fails in House Committee,” *Comm. Daily*, Apr. 22, 2005, at 2 (citing “several members” of the House Committee on Homeland Security).

¹² Danielle Belopotosky, “Public Safety Advocates Push for Conversion to Digital TV,” *Nat’l Journal*, *Tech. Daily PM*, Spectrum Section, Mar. 7, 2005 (quoting Robert LeGrande, Deputy CTO, Office of Public Safety Wireless Communications, Wash., D.C.). *See also* Drew Clark, “Key Chairman Reinforces Transition Deadline to Broadcasters,” *Nat’l Journal*, *Tech. Daily PM*, Apr. 18, 2005 (quoting Chrmn. Joe Barton, House Committee on Energy and Commerce) (“[First responders and law enforcement groups] ... are clamoring for [the 24 MHz] that [Congress] gave to broadcasters when we told [them] to go digital.... There is no spectrum to give unless we reclaim ... that spectrum.”).

2. The 700 MHz Band is Prime Spectrum for Public Safety – Offering Highly Favorable Propagation Characteristics, Lower Deployment Costs, and Interoperability

As LeGrande points out, “[Public safety] agencies ... need to communicate with ‘first responders’ – often through marble buildings and in subway tunnels.”¹³ Use of the TV broadcast bands would make such improvements in public safety service possible because the TV broadcast bands offer highly favorable propagation characteristics, including the ability to pass through objects such as buildings, weather, and foliage.¹⁴ These propagation characteristics would allow wireless devices to serve applications requiring greater range of operation and signal coverage than that afforded to similar devices operating in higher frequency bands. The upshot for public safety is the difference between being able to communicate a timely warning in an emergency like 9/11 or the status quo, where such effective communication is not possible and American lives are unnecessarily lost.¹⁵

In addition to improving transmission, the ability to use TV frequencies would reduce the cost and thus facilitate more rapid deployment of interoperable networks to

¹³ Belopotosky (quoting Robert LeGrande).

¹⁴ See Statement of Patrick P. Gelsinger, CTO, Intel Corp., Hearing on Completing the Digital Television Transition, Before the Senate Committee on Commerce, Science and Transportation, June 9, 2004, at 12 (“Gelsinger Statement”) (“[B]ecause TV frequencies ... penetrate walls, they would be less dependent on line of sight transmission to outdoor antennas.”).

¹⁵ “The lack of interoperable communications is one of the greatest threats to public safety. At both Oklahoma City and the Pentagon, the incident commanders had to use human runners to communicate. The 9/11 Commission's report details how the lack of interoperable communications proved fatal for 343 firefighters in the World Trade Center Towers. I would like to urge the members of this committee ... to set a date certain for clearing the 700 MHz spectrum for public safety use.” John M. Buckman, III, Past Pres., Internat’l Assoc. of Fire Chiefs, Hearing on Preparedness System Oversight, Before the House Committee on Transportation and Infrastructure, Subcommittee on Economic Development, Public Buildings and Emergency Management, Apr. 14, 2005.

serve local, state, and federal public safety entities throughout the country.¹⁶ For a given level of quality to a given coverage area, the 700 MHz band requires fewer antennas and less power than spectrum at higher frequencies.¹⁷ Specifically, “[e]ach tower broadcasting at 700 MHz can cover twice as large an area as a transmitter broadcasting at 1900 MHz spectrum (and four times as large an area as a transmitter broadcasting at 2500 MHz).¹⁸ Thus, “it is far less expensive to construct new networks with 700 MHz spectrum than with 1900 or 2500 MHz spectrum.”¹⁹ For example, using the 700 MHz band to provide wireless broadband service – as opposed to the 1.9 or 2.5 GHz bands – requires only ½ to ¼ of the capital.²⁰ These savings could significantly accelerate the speed of deployment of public safety networks.

¹⁶ Gelsinger Statement at 10-11.

¹⁷ *Id.*

¹⁸ Letter from Charles C. Townsend, Managing General Partner, Aloha Partners, L.P., to the Hon. Joe Barton *et al.*, House Energy and Commerce Committee, dated Apr. 27, 2005, at 2 (“Aloha Analysis”). *See also* Gelsinger Statement at 12 (stating that “using 2.5 GHz frequencies ... would require 4 to 5 as many base stations [than using 700 MHz frequencies] to achieve equal geographic coverage, for a given air interface and bandwidth”).

¹⁹ Aloha Analysis at 2. *See also* Draft Letter from Wm. P. Zarakas *et al.*, The Brattle Group, to the Hon. Joe Barton *et al.*, House Energy and Commerce Committee, dated Apr. __, 2005, at 4 (“Brattle Group Analysis”) (commissioned by Qualcomm, Inc.) (stating that it would cost less to deploy and operate a network using frequencies in the 700 MHz band than frequencies in the 1.9 GHz band).

²⁰ ITI submits that, all things being equal, if a 1900 MHz tower and a 2500 MHz tower can cover an area ½ to ¼ as large, respectively, as a 700 MHz tower, then it should take ½ to ¼ the capital for a set of 700 MHz towers to cover the same area as a set of 1900 MHz towers and a set of 2500 MHz towers, respectively. *See also* Chris Knudsen, Vulcan Capital, “Lower Frequencies Improve the Subscriber Operating Model,” WCA Convention, Wash., D.C., June 3, 2004 (stating that using the 700 MHz band to provide wireless broadband service in Bellevue, WA – as opposed to the 2.6 GHz band – requires ½ to ⅓ of the capital).

III. PUBLIC SAFETY LACKS MUCH OF THE FUNDING NEEDED TO ACHIEVE NATIONWIDE INTEROPERABILITY

The “9/11 Commission Implementation Act of 2004” identified the lack of interoperability among public safety agencies as a critical issue affecting the nation’s homeland security.²¹ Although there has been some progress since 9/11 – through efforts such as RapidCom 9/30²² – first responders have yet to achieve full interoperability.

Given the recent and significant additional spectrum allocated to public safety, many in the emergency responder community contend that a lack of sufficient funding is the biggest impediment to nationwide interoperability. For example, the First Response Coalition (“FRC”), a non-profit organization formed to educate the public about the need for increased first responder funding, states that “[t]he largest barrier to public safety communications interoperability is cost.... [N]either the federal nor state governments have currently appropriated funds in the[] [necessary] amounts.”²³ The FRC cites cost estimates for interoperability ranging from “several billion dollars over 5-10 years” to “\$18.3 billion to replace the existing ... infrastructure.”²⁴ Despite these estimates, the

²¹ Intelligence Reform Act, 118 Stat. at 3775. *See also* “The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the U.S.,” Executive Summary, at 20 (2004) (recommending “improved connectivity for public safety communications”).

²² RapidCom 9/30 is a federal program designed to ensure the interoperability of public safety communications in 10 of the country’s largest metropolitan areas. *See* “Fact Sheet: RapidCom 9/30 and Interoperability Progress,” Dept. of Homeland Security (2004) (describing interoperability efforts) (http://www.dhs.gov/dhspublic/interapp/press_release/press_release_0470.xml).

²³ “Its Time to Talk: Achieving Interoperable Communications for America’s First Responders,” The First Response Coalition, Oct. 2004, at 7 (“FRC: It’s Time to Talk”).

²⁴ *Id.* (citing 1998 Public Safety Wireless Network estimate of “\$18.3 billion to replace the existing ... infrastructure;” 2004 GAO estimate of “several billion dollars over 5-10 years;” 2003 OMB estimate of “more than \$15 billion ... not includ[ing] training of staff or maintenance of equipment”).

FRC states that the federal government plans to spend only \$6.8 billion on public safety interoperability from 2004 to 2009.²⁵

ITI believes that, regardless of the interoperability solution,²⁶ this lack of funding prevents the public safety community from most effectively addressing the country's pressing post-9/11 homeland security needs. Indeed, many emergency agencies have been unable to purchase the most advanced equipment, implement the newest and best technologies, recruit and hire additional officers and first responders, and/or most effectively train America's public safety workers.²⁷

Thus, insufficient funding has precluded the public safety community from fully and best utilizing its current spectrum allocations in order to implement much-needed nationwide interoperability. For this reason, ITI believes that, in its report to Congress, the FCC should recommend that Congress provide adequate funding to the public safety community to help facilitate deployment of a nationwide interoperable communications network.

IV. THE OPPORTUNITY COST OF *NOT* CLEARING THE 700 MHZ BAND OF LEGACY ANALOG TELEVISION STATIONS IS ENORMOUS

ITI asserts that the opportunity cost of *not* promptly clearing the 700 MHz band of legacy analog TV stations currently encumbering channels 52 – 69 is enormous. In addition to vastly improving homeland security, expeditiously clearing (and auctioning)

²⁵ “America’s First Responders and the Federal Budget: A Study of Rhetoric Versus Reality,” The First Response Coalition, Mar. 2005, at 9 (“FRC: America’s First Responders and the Federal Budget”).

²⁶ ITI believes that there may be a number of solutions to the public safety interoperability problem, including both radio and IP-based networks.

²⁷ “FRC: America’s First Responders and the Federal Budget” at 1-2, 8-9; “FRC: It’s Time to Talk” at 1-6, 7-13.

the 700 MHz band would greatly advance spectrum efficiency, generate substantial federal receipts, and produce substantial consumer benefits. This country cannot afford to forego such significant gains.

A. The 700 MHz Band is Highly Underutilized in its Current Use

In its current use, the 700 MHz band is highly underutilized – especially relative to the other possible uses of this spectrum. In fact, ITI notes that, across the United States, there are fewer than 200 analog TV stations operating on UHF channels 52 – 69.²⁸ Another study indicates that, in various TV markets (or DMAs) across the country, there is only a maximum of approximately six UHF stations (*i.e.*, 36 MHz) occupying the 108 MHz that span channels 52 – 69.²⁹

Specifically, the study indicates that, in the Los Angeles TV market, the 2nd most congested DMA, there are only six stations (totaling only 36 MHz) occupying the 18 channels (or 108 MHz) spanning channels 52 – 69; in the Washington, D.C. TV market, the 8th most crowded DMA, there are only five stations (totaling only 30 MHz) occupying channels 52 – 69; in the Burlington, Vermont TV market, the 89th DMA, there is only one station (totaling 6 MHz) occupying channels 52 – 69; and, in the El Paso, Texas TV market, the 100th DMA, and the Juneau, Alaska TV market, the 206th DMA,

²⁸ Evan Kwerel, Sr. Economic Advisor, FCC, “Reclaiming TV Spectrum: Spectrum Policy Changes and Opportunities,” Presentation at Intel Developer Forum, Sept. 8, 2004 (stating that there are 94 analog TV stations operating on channels 52-59 and 97 analog TV stations operating on channels 60-69).

²⁹ See *infra* notes 30-31 and accompanying text. See also *In the Matter of Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, Carriage of the Transmissions of Digital Television Broadcast Stations, Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television*, Order on Recon. of the Third Report and Order, WT Docket No. 99-168, CS Docket No. 98-120, MM Docket No. 00-39, rel. Sept. 17, 2001 (noting that the number of stations on UHF channels 59-69 is “small”). Moreover, the over-the-air viewership of most stations on channels 52 – 69 is very low. See, *e.g.*, *id.* (noting the “low viewership” on UHF stations 59-69).

there are no stations (totaling 0 MHz) occupying channels 52 – 69.³⁰ These figures are summarized in the following table:³¹

TV Stations Operating in Channels 52-69 (108 MHz total)

DMA Rank	TV Market (DMA)	Total Number of TV Stations	Total MHz Occupied by TV Stations	% of 108 MHz Occupied by TV Stations
2	Los Angeles, CA	6	36 MHz	33.33%
8	Washington, D.C.	5	30 MHz	4.63%
89	Burlington, VT	1	6 MHz	0.92%
100	El Paso, TX	0	0 MHz	0%
206	Juneau, AL	0	0 MHz	0%

ITI contends that there is no need for considerable portions of this prime spectrum to continue to lay fallow. Even in the most congested markets, relatively little spectrum needs to be cleared in order to free up 108 MHz of prime spectrum for public safety communications and high value commercial services.³² The opportunity cost of continuing to let a handful of remaining broadcasters sit on this prime spectrum is enormous.

³⁰ Comments of the New America Foundation *et al.*, *In the Matter of Unlicensed Operation in the TV Broadcast Bands; Additional Spectrum for Unlicensed Devices Below 900 MHz and in the 3 GHz Band*, ET Docket Nos. 04-186, 02-380, Nov. 30, 2004, at 8-9, Appendix A at Secs. 2, 3 (“*NAF Comments*”). See also Comments of Adaptrum, Inc., *Unlicensed Operation in the TV Broadcast Bands; Additional Spectrum for Unlicensed Devices Below 900 MHz and in the 3 GHz Band*, ET Docket Nos. 04-186, 02-380, Sept. 1, 2004, at 20 (observing that, in the San Francisco Bay area, the 5th most congested TV market, there is on average 70 MHz of vacant bandwidth in channels 52 – 69).

³¹ ITI calculated columns 4 and 5 of this table using the figures provided in Appendix A, Sections 2 and 3, of *NAF Comments*.

³² ITI notes that, soon after the legacy analog TV stations are cleared, any remaining DTV stations on channels 52 – 69 can be relocated to the lower 700 MHz band.

B. The 700 MHz Band Would Be Highly Valuable If Put to Its Reallocated Uses

If cleared of legacy analog TV stations, the 700 MHz spectrum, at long last could be utilized at its full capacity and capability, as was intended when the band was reallocated in 1997. The ability to finally put this spectrum to its highest and best uses – meeting public safety needs and consumer demand for wireless broadband service (especially in rural and underserved areas) – would effectively promote national security and significantly boost economic growth in this country.

The cleared 700 MHz spectrum would command billions of dollars in auction revenues. In fact, Aloha Partners, L.P., the largest licensee of 700 MHz spectrum in the U.S. (and a future bidder for the cleared spectrum), estimates that the 700 MHz auction could generate between \$20 billion to \$30 billion for the U.S. Treasury.³³ Similarly, the Brattle Group, an economic consulting firm with expertise in competition in network industries, estimates that, if the FCC were to auction licenses for the remaining 60 MHz of unencumbered “commercial” spectrum in the 700 MHz band, the U.S. Treasury would receive anywhere from \$17 billion to \$30 billion.³⁴

In addition, the consumer surplus that could be gained from the remaining 60 MHz of commercially allocated spectrum in this band is enormous.³⁵ Clearing the 700

³³ Aloha Analysis at 1.

³⁴ Brattle Group Analysis at 1-2. ITI notes that this estimate assumes that the date by which all legacy analog TV stations must clear the 700 MHz band spectrum is both firm and proximate. *Id.* at 2, 7. *See also* Amol Sharma, “TV Spectrum Auction Gains Attention as Possible Budget Reconciliation Move,” CQ Today, Budget Section, Apr. 20, 2005 (citing auction revenue estimates up “to as much as \$30 billion”).

³⁵ Consumer surplus is an economic measure of consumer welfare defined as the difference between what consumers are *willing* to pay for a given good, service, or commodity (here, for example, new commercial broadband services), minus what they *must* pay. *See, e.g.,* David L. Kaserman and John W. Mayo, Government and Business: The Economics of Antitrust and Regulation 49-50 (1995).

MHz band of legacy analog stations would provide consumer benefits above and beyond the actual auction receipts. Indeed, clearing and auctioning this prime spectrum would facilitate the introduction of new commercial broadband services (made possible by flexible licenses and more bandwidth) and lower prices for existing services (as a result of increased competition with mobile, wireless, and cable services).³⁶ “[T]hese consumer benefits likely would exceed the auction receipts in value – possibly by a significant amount.”³⁷ In fact, the consumer surplus is expected to be valued at tens of billions of dollars every year.³⁸

Furthermore, Congress could earmark a substantial portion of the auction proceeds for federal budget reconciliation purposes.³⁹ As Congressman Fred Upton has stated, “By being able to sell the [700 MHz] spectrum, that’s going to help [Congress] reduce the deficit.”⁴⁰ Certainly, “budget writers struggling to narrow the federal deficit are eyeing [the] potential multi-billion dollar windfall from the sale of valuable broadcast frequencies as television stations move from analog to digital signals.”⁴¹ Thus, the

³⁶ Brattle Group Analysis at 2, 8.

³⁷ *Id.* at 2. Indeed, “[t]wo prominent telecommunications economists have estimated that the consumer surplus ... associated with efficient use of spectrum could be an order of magnitude greater than the auction value of spectrum licenses.” *Id.* at 8.

³⁸ Analogously, it was estimated that the consumer surplus from 80 MHz of additional spectrum for cellular operators would create more than \$30 billion in annual gain for consumers. Testimony of Thomas W. Hazlett, Sr. Fellow, Manhattan Institute for Policy Research, Hearing on Completing the Digital Television Transition, Before the Senate Committee on Commerce, Science and Transportation, June 9, 2004, at 2.

³⁹ The House Committee on Energy and Commerce was instructed to find \$20 billion in savings under the House’s budget resolution for fiscal years 2005 – 2010. H. Con. Res. 95 (2005).

⁴⁰ Sharma. *See also* Victoria Wachino, “The House Budget Committee’s Proposed Medicaid and SCHIP Cuts are Larger Than Those the Administration Proposed,” Center on Budget and Policy Priorities, Mar. 10, 2005 (stating that “[r]eceipts from spectrum auctions are counted as negative mandatory outlays”).

⁴¹ Sharma.

billions of dollars in auction revenues could decrease the federal deficit by a considerable amount.

Moreover, Congress could earmark a portion of the auction revenues for the public safety community – including the operation and administration of a nationwide interoperable communications network. As discussed above, lack of interoperability is a significant problem for first responders, and the public safety community has been seeking additional funding for years. Now, the federal government could help ease public safety’s financial shortfall and better enable emergency responders’ protection of the American people in this post-9/11 era.

Thus, ITI firmly believes that providing the public safety community with the funds it needs to most efficiently utilize its currently allocated bandwidth – rather than additional spectrum – would be the most effective use of the cleared 700 MHz band. Indeed, it would be far more efficient to auction 10 MHz of this spectrum – which could generate up to \$5 billion in auction receipts⁴² and even larger consumer benefits – and give a portion of the revenues to public safety than it would be to allocate additional spectrum to emergency responders that they cannot afford to use. ITI believes that, once public safety has the funds it needs to maximize the capacity and capability of its currently allocated spectrum, first responders will have more than enough bandwidth to address the country’s pressing homeland security needs.

⁴² Last fall, the FCC estimated the value of 10 MHz of nationwide spectrum in the 1.9 GHz band to be \$4.86 billion. *In the Matter of Improving Public Safety Communications in the 800 MHz Band*, Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order, and Order, rel. Aug. 6, 2004, at 144, 153. ITI submits that this figure represents an appropriate estimate of the value of 10 MHz of nationwide spectrum in the 700 MHz band given that one-sixth (*i.e.*, 10 MHz / 60 MHz) of the expected auction revenues (*i.e.*, \$20 - \$30 billion) is equal to \$3.33 - \$5 billion.

V. CONCLUSION

For the reasons set forth above, ITI urges Congress and the FCC to take expeditious action to clear the 700 MHz band of legacy analog TV stations and auction the cleared spectrum for commercial services. Prompt action in this regard will at long last facilitate full and efficient utilization of this prime spectrum, provide the public safety community with the funding necessary to most effectively protect the nation's citizens, and create substantial benefits for American consumers.

Respectfully submitted,

INFORMATION TECHNOLOGY INDUSTRY COUNCIL